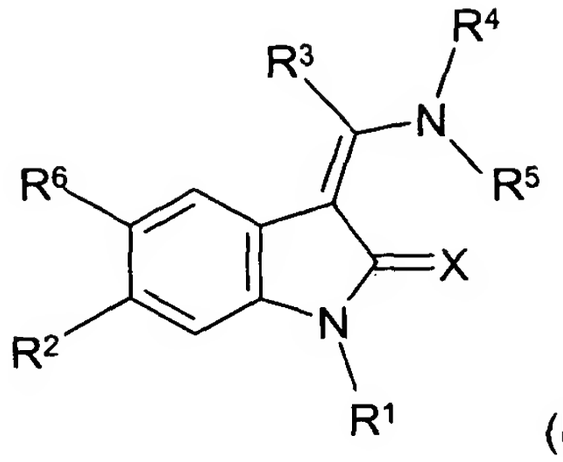
What is claimed is:

1. A compound of the formula



(I),

in which

X is an oxygen atom,

$R^1$ is a hydrogen atom,

$R^2$ is a fluorine, chlorine or bromine atom or a cyano group,

$R^3$ is a phenyl group or a phenyl group which is monosubstituted by a fluorine, chlorine, bromine or iodine atom or by a $C_{1-3}$-alkoxy group, where the abovementioned unsubstituted and the monosubstituted phenyl groups may additionally be substituted in the 3- or 4-position

by a fluorine, chlorine or bromine atom,

by a cyano group,

by a $C_{1-3}$-alkoxy or $C_{1-2}$-alkyl-carbonyl-amino group,

by a cyano-$C_{1-3}$-alkyl, carboxy-$C_{1-3}$-alkyl, carboxy-$C_{1-4}$-alkoxy, carboxy-$C_{1-3}$-alkylamino, carboxy-$C_{1-3}$-alkyl-N-($C_{1-3}$-alkyl)-amino, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-

alkyl, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkoxy, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkylamino, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkyl-N-($C_{1-3}$-alkyl)-amino, amino-$C_{1-3}$-alkyl, amino-carbonyl-$C_{1-3}$-alkyl, ($C_{1-2}$-alkylamino)-carbonyl-$C_{1-3}$-alkyl, di-($C_{1-2}$-alkyl)-amino-carbonyl-$C_{1-3}$-alkyl, ($C_{1-2}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{1-4}$-alkoxy-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{3-6}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, (phenyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{3-6}$-cycloalkyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{3-6}$-cycloalkyl-$C_{1-3}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, (thiophen-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (furan-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (phenyl-$C_{1-3}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, (2-($C_{1-4}$-alkoxy)-benzoyl-carbonyl)-amino-$C_{1-3}$-alkyl, (pyridin-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (pyridin-3-yl-carbonyl)-amino-$C_{1-3}$-alkyl-, (pyridin-4-yl-carbonyl)-amino-$C_{1-3}$-alkyl- or $C_{1-3}$-alkyl-piperazin-1-yl-carbonyl-$C_{1-3}$-alkyl group,

by a carboxy-$C_{2-3}$-alkenyl, aminocarbonyl-$C_{2-3}$-alkenyl, ($C_{1-3}$-alkylamino)-carbonyl-$C_{2-3}$-alkenyl, di-($C_{1-3}$-alkyl)-amino-carbonyl-$C_{2-3}$-alkenyl or $C_{1-4}$-alkoxy-carbonyl-$C_{2-3}$-alkenyl group,

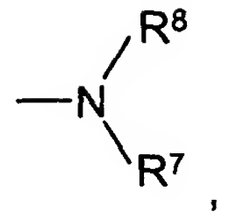
where the substituents may be identical or different,

$R^4$ is a phenyl group or a phenyl group which is monosubstituted

by a $C_{1-3}$-alkyl group which is terminally substituted by an amino, guanidino, mono- or di-($C_{1-2}$-alkyl)-amino-, N-[ω-di-($C_{1-3}$-alkyl)-amino-$C_{2-3}$-alkyl]-N-($C_{1-3}$-alkyl)-amino, N-methyl-($C_{3-4}$-alkyl)-amino, N-($C_{1-3}$-alkyl)-N-benzylamino, N-($C_{1-4}$-alkoxycarbonyl)-amino, N-($C_{1-4}$-alkoxycarbonyl)-$C_{1-4}$-alkylamino, 4-($C_{1-3}$-alkyl)-piperazin-1-yl, imidazol-1-yl, pyrrolidin-1-yl, azetidin-1-yl, morpholin-4-yl, piperazin-1-yl, thiomorpholin-4-yl group,

by a di-($C_{1-3}$-alkyl)-amino-($C_{1-3}$-alkyl)-sulphonyl, 2-[di-($C_{1-3}$-alkyl)-amino]-ethoxy, 4-($C_{1-3}$-alkyl)-piperazin-1-yl-carbonyl, {ω-[di-($C_{1-3}$-alkyl)-amino]-($C_{2-3}$-alkyl)}-N-($C_{1-3}$-alkyl)-amino-carbonyl, 1-($C_{1-3}$-alkyl)imidazol-2-yl, ($C_{1-3}$-alkyl)-sulphonyl group, or

by a group of the formula



,

in which

$R^7$ is a $C_{1-2}$-alkyl, $C_{1-2}$-alkyl-carbonyl, di-($C_{1-2}$-alkyl)-amino-carbonyl-$C_{1-3}$-alkyl or $C_{1-3}$-alkylsulphonyl group and

$R^8$ is $C_{1-3}$-alkyl, ω-[di-($C_{1-2}$-alkyl)-amino]-$C_{2-3}$-alkyl, ω-[mono-($C_{1-2}$-alkyl)-amino]-$C_{2-3}$-alkyl group, or

a ($C_{1-3}$-alkyl)-carbonyl, ($C_{4-6}$-alkyl)-carbonyl or carbonyl-($C_{1-3}$-alkyl) group which is terminally substituted by a di-($C_{1-2}$-alkyl)-amino, piperazin-1-yl or 4-($C_{1-3}$-alkyl)-piperazin-1-yl group,

where all dialkylamino groups present in the radical $R^4$ may also be present in quaternized form, for example as an N-methyl-(N,N-dialkyl)-ammonium group, where the counterion is preferably selected from the group consisting of iodide, chloride, bromide, methylsulphonate, para-toluenesulphonate and trifluoroacetate,

$R^5$ is a hydrogen atom and

$R^6$ is a hydrogen atom,

where the abovementioned alkyl groups include linear and branched alkyl groups in which additionally one to 3 hydrogen atoms may be replaced by fluorine atoms,

where additionally a carboxyl, amino or imino group present may be substituted by an in vivo cleavable radical or may be present in the form of a prodrug radical, for example in the form of a group which can be converted in vivo into a carboxyl group or in the form of a group which can be converted in vivo into an imino or amino group,

and its tautomers, enantiomers, diastereomers, mixtures thereof and salts thereof.

2. A compound of the formula I according to Claim 1 in which

X, $R^1$, $R^2$, $R^4$, $R^5$ and $R^6$ are as defined in Claim 1 and

$R^3$ is a phenyl group which is substituted

by a $C_{1-2}$-alkyl-carbonyl-amino group,

by a carboxy-$C_{1-3}$-alkyl, carboxy-$C_{1-4}$-alkoxy, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkyl, $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkoxy, aminocarbonyl-$C_{1-3}$-alkyl, ($C_{1-2}$-alkylamino)-carbonyl-$C_{1-3}$-alkyl, di-($C_{1-2}$-alkyl)-aminocarbonyl-$C_{1-3}$-alkyl, ($C_{1-2}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{1-4}$-alkoxy-carbonyl)-amino-$C_{1-3}$-alkyl, (phenyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{3-6}$-cycloalkyl-carbonyl)-amino-$C_{1-3}$-alkyl, ($C_{3-6}$-cycloalkyl-$C_{1-3}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, (thiophen-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (furan-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (phenyl-$C_{1-3}$-alkyl-carbonyl)-amino-$C_{1-3}$-alkyl, (2-($C_{1-4}$-alkoxy)-benzoyl-carbonyl)-amino-$C_{1-3}$-alkyl, (pyridin-2-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (pyridin-3-yl-carbonyl)-amino-$C_{1-3}$-alkyl, (pyridin-4-yl-carbonyl)-amino-$C_{1-3}$-alkyl or $C_{1-3}$-alkyl-piperazin-1-yl-carbonyl-$C_{1-3}$-alkyl group,

by an aminocarbonyl-$C_{2-3}$-alkenyl, ($C_{1-3}$-alkylamino)-carbonyl-$C_{2-3}$-alkenyl, di-($C_{1-3}$-alkyl)-amino-carbonyl-$C_{2-3}$-alkenyl or $C_{1-4}$-alkoxy-carbonyl-$C_{2-3}$-alkenyl group.

3. A compound of the formula I according to Claim 1 in which

X, $R^1$, $R^2$, $R^4$, $R^5$ and $R^6$ are as defined in Claim 1 and

$R^3$ is a phenyl group substituted by a carboxy-$C_{1-3}$-alkyl or $C_{1-4}$-alkoxy-carbonyl-$C_{1-3}$-alkyl group.

4. A compound of the formula I according to any of Claims 1 to 3, in which

X, $R^1$, $R^3$, $R^4$, $R^5$ and $R^6$ are as defined in any of Claims 1 to 3 and

$R^2$ is a fluorine or chlorine atom.

5. A compound of the formula I according to Claim 1, selected from the following group:

(a) 3-Z-[1-(4-dimethylaminomethylanilino)-1-(3-(2-carboxyethyl)phenyl)methylene]-6-chloro-2-indolinone

(b) 3-Z-[1-(4-dimethylaminomethylanilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(c) 3-Z-[1-(4-dimethylaminomethylanilino)-1-(3-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(d) 3-Z-[1-(4-(N-(4-methylpiperazin-1-ylmethylcarbonyl)-N-methylamino)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(e) 3-Z-[1-(4-(N-(2-dimethylaminoethyl)-N-methylsulphonylamino)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(f) 3-Z-[1-(4-(N-(3-dimethylaminopropyl)-N-acetylamino)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(g) 3-Z-[1-(4-(1-methylimidazol-2-yl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(h) 3-Z-[1-(4-(N-(dimethylaminomethylcarbonyl)-N-methylamino)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(i) 3-Z-[1-(4-(N-(2-dimethylaminoethylcarbonyl)-N-methylamino)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(j) 3-Z-[1-(4-(pyrrolidin-1-ylmethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(k) 3-Z-[1-(4-(diethylaminomethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-fluoro-2-indolinone

(l) 3-Z-[1-(4-(2-dimethylaminoethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-chloro-2-indolinone

(m) 3-Z-[1-(4-dimethylaminomethylanilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-chloro-2-indolinone

(n) 3-Z-[1-(4-(pyrrolidin-1-ylmethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-chloro-2-indolinone

(o) 3-Z-[1-(4-(pyrrolidin-1-ylmethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-bromo-2-indolinone

(p) 3-Z-[1-(4-(dimethylaminomethyl)anilino)-1-(4-(2-carboxyethyl)phenyl)methylene]-6-bromo-2-indolinone

(q) 3-Z-[1-(4-(diethylaminomethyl)anilino)-1-(4-(2-carboxyethyl)-methylene]-6-bromo-2-indolinone

and their salts.

6. A physiologically acceptable salt of a compound according to any one of Claims 1, 2, 3 or 5.

7. A physiologically acceptable salt of a compound according to Claim 4.

8. A medicament comprising a compound of the formula I according to any one of Claims 1, 2, 3 or 5, and one or more inert carrier materials and/or diluents.

9. A medicament, comprising a compound of the formula I according to Claim 4, and one or more inert carrier materials and/or diluents.

10. A medicament, comprising a physiologically acceptable salt according to Claim 6, and one or more inert carrier materials and/or diluents.

11. A medicament, comprising a physiologically acceptable salt according to Claim 7, and one or more inert carrier materials and/or diluents.

12. A method for treating excessive or abnormal cell proliferation comprising administering a compound of the formula I according to any one of Claims 1, 2, 3, or 5.

13. A method for treating excessive or abnormal cell proliferation comprising administering a compound of the formula I according to Claim 4.

14. A method for treating excessive or abnormal cell proliferation comprising administering a physiologically acceptable salt according to Claim 6.

15. A method for treating excessive or abnormal cell proliferation comprising administering a physiologically acceptable salt according to Claim 7.